

DOCKET NO.: CELL-0315

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Alastair David Griffiths Lawson, et al. **Confirmation No.: 2+2**
Application No.: 10/578,384 **Group Art Unit: 1645**
Filing Date: January 16, 2007 **Examiner: Not yet assigned**
For: Method For The Treatment Of Inflammatory Bowel Disease

ELECTRONICALLY FILED
DATE OF DEPOSIT: August 27, 2007

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.G./

DOCKET NO.: CELL-0315

- 2 -

PATENT

Copies of reference numbers 39-123 listed on the attached Form PTO-1449 are enclosed herewith.

Copies of reference numbers 1-38 on the attached Form PTO 1449 are not required to be submitted pursuant to 37 CFR § 1.98(a)(2)(ii).

Copies of references - are not being submitted because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application number , filed for which a claim for priority under 35 U.S.C. § 120 has been made in the instant application.

The relevance of those listed references which are not in the English language is as follows:

There are no listed references which are not in the English language.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050.

Date: August 24, 2007

/Jane E. Ingles/
Jane E. Ingles
Registration No. 48,444

WOODCOCK WASHBURN LLP
Cira Centre
2929 Arch Street, 12th Floor
Philadelphia, PA 19104-2891
Telephone: (215) 568-3100
Facsimile: (215) 568-3439

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.G./

Form PTO-1449 Modified		Docket No. CELL-0315	Application No. 10/578,384
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Alastair David Griffiths Lawson, et al.	
U.S. Department of Commerce Patent and Trademark Office		Filing Date January 16, 2007	Group 1645
		Confirmation No. 1913	

U. S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Subclass
1	4,439,196	03/27/84	Higuchi	604	890
2	4,447,224	05/08/84	DeCant, Jr. et al.	604	67
3	4,447,233	05/08/84	Mayfield	604	152
4	4,475,196	10/02/84	La Zor	371	29
5	4,486,194	12/04/84	Ferrara	604	897
6	4,487,603	12/11/84	Harris	604	152
7	4,596,556	06/24/86	Morrow et al.	604	70
8	4,790,824	12/13/88	Morrow et al.	604	143
9	4,941,880	07/17/90	Burns	604	143
10	4,946,778	08/07/90	Ladner et al.	435	69.6
11	4,980,286	12/25/90	Morgan et al.	435	172.3
12	5,064,413	11/12/91	McKinnon et al.	604	70
13	5,219,996	06/15/93	Bodmer et al.	530	387.3
14	5,223,409	06/29/93	Ladner et al.	435	69.7
15	5,312,335	05/17/94	McKinnon et al.	604	72
16	5,383,851	01/24/95	McKinnon, Jr. et al.	604	68
17	5,399,163	03/21/95	Peterson et al.	604	68
18	5,403,484	04/04/95	Ladner et al.	435	235.1
19	5,427,908	06/27/95	Dower et al.	435	5
20	5,516,637	05/14/96	Huang et al.	435	6

EXAMINER	/Phillip Gabel/	DATE CONSIDERED	12/03/2008
-----------------	-----------------	------------------------	------------

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.G./

Form PTO-1449 Modified		Docket No. CELL-0315	Application No. 10/578,384
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Alastair David Griffiths Lawson, et al.	
U.S. Department of Commerce Patent and Trademark Office		Filing Date January 16, 2007	Group 1645
		Confirmation No. 1913	

U. S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Subclass
21	5,571,698	11/05/96	Ladner et al.	435	69.7
22	5,580,717	12/03/96	Dower et al.	435	5
23	5,585,089	12/17/96	Queen et al.	424	133.1
24	5,658,727	08/19/97	Barbas et al.	435	6
25	5,677,425	10/14/97	Bodmer et al.	530	387.1
26	5,698,426	12/16/97	Husc	435	172.3
27	5,733,743	03/31/98	Johnson et al.	435	69.1
28	5,738,996	04/14/98	Hodges et al.	435	7.1
29	5,750,753	05/12/98	Kimae et al.	556	440
30	5,780,225	07/14/98	Wigler et al.	435	6
31	5,807,683	09/15/98	Brenner	435	7.1
32	5,821,047	10/13/98	Garrard et al.	435	5
33	5,932,595	08/03/99	Bender et al.	514	317
34	5,969,108	10/19/99	McCafferty et al.	530	387.3
35	2002/0176847 A1	11/28/02	Rajavashisth	424	93.2
36	2004/0235960 A1	11/25/04	Burns et al.	514	649
37	2005/0020619 A1	01/27/05	Betschmann et al.	514	301
38	2005/0059113 A1	03/17/05	Bedian et al.	435	69.1

EXAMINER	/Phillip Gambel/	DATE CONSIDERED	12/03/2008
-----------------	------------------	------------------------	------------

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.G./

Form PTO-1449 Modified		Docket No. CELL-0315	Application No. 10/578,384
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Alastair David Griffiths Lawson, et al.	
U.S. Department of Commerce Patent and Trademark Office		Filing Date January 16, 2007	Group 1645
		Confirmation No. 1913	

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
	39	0 392 745 B1	11/02/94	EP		
	40	0 948 544 B1	05/02/03	EP		
	41	1 223 980 B1	05/21/03	EP		
	42	00/67777 A1	11/16/00	WO		
	43	01/30381 A2	05/03/01	WO		
	44	02/087496 A2	11/07/02	WO		
	45	03/020698 A2	03/13/03	WO		
	46	2004/051268 A1	06/17/04	WO		
	47	2005/003169 A2	01/13/05	WO		
	48	2005/003170 A2	01/13/05	WO		
	49	2005/003171 A2	01/13/05	WO		
	50	2005/010009 A1	02/03/05	WO		
	51	2005/012226 A1	02/10/05	WO		
	52	2005/030124 A2	04/07/05	WO		
	53	86/01533 A1	03/13/86	WO		
	54	90/02809 A1	03/22/90	WO		
	55	91/10737 A1	07/25/91	WO		
	56	92/01047 A1	01/23/92	WO		
	57	92/02551 A1	02/20/92	WO		

EXAMINER	/Phillip Gambel/	DATE CONSIDERED	12/03/2008
-----------------	------------------	------------------------	------------

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.G./

Form PTO-1449 Modified	Docket No. CELL-0315	Application No. 10/578,384
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)	Applicant Alastair David Griffiths Lawson, et al.	
U.S. Department of Commerce Patent and Trademark Office	Filing Date January 16, 2007	Group 1645
	Confirmation No. 1913	

FOREIGN PATENT DOCUMENTS

EXAMINER /Phillip Gambel/ **DATE CONSIDERED** 12/03/2008

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.G./

Form PTO-1449 Modified	Docket No. CELL-0315	Application No. 10/578,384
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)	Applicant Alastair David Griffiths Lawson, et al.	
U.S. Department of Commerce Patent and Trademark Office	Filing Date January 16, 2007	Group 1645
	Confirmation No. 1913	

NON-PATENT DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

67	Ames et al., "Conversion of murine Fab's isolated from a combinatorial phage display library to full length immunoglobulins," <i>J. Immunol. Methods</i> , 1995, 184, 177-186
68	Babcock, J. et al., "A novel strategy for generating monoclonal antibodies from single, isolated lymphocytes producing antibodies of defined specificities," <i>Proc. Natl. Acad. Sci. USA</i> , 1996, 93(15), 7843-7848
69	Bollard, C. "Adapting a transforming growth factor beta-related tumor protection strategy to enhance antitumor immunity," <i>Blood</i> , 99, 3179-3187
70	Brinkman, U. et al., "Phage display of disulfide-stabilized Fv fragments," <i>J. Immunol. Methods</i> , 1995, 182, 41-50
71	Burton, D. R. et al., "Human Antibodies from Combinatorial Libraries," <i>Adv. Immunol.</i> , 1994, 57, 191-280
72	Carrell, T. et al., "A Novel Procedure for the Synthesis of Libraries Containing Small Organic Molecules," <i>Angew. Chem. Int. Ed. Engl.</i> , 1994, 33(20), 2059-2061
73	Cecchini, M. G. et al., "Role of colony stimulating factor-1 in the establishment and regulation of tissue macrophages during postnatal development of the mouse," <i>Development</i> , 1994, 120(6), 1357-1372
74	Cerretti, D. P. et al., "Human Macrophage-Colony Stimulating Factor: Alternative RNA And Protein Processing From A Single Gene," <i>Mol. Immunol.</i> , 1988, 25, 761-770
75	Chapman, A. P., "PEGylated antibodies and antibody fragments for improved therapy: a review," <i>Advanced Drug Delivery Reviews</i> , 2002, 54, 531-545
76	Cho, C. Y. et al., "An Unnatural Biopolymer," <i>Science</i> , 1993, 261, 1303-1305
77	Cole, S. P. C. et al., "The Ebv - Hybridoma Technique And Its Application To Human Lung Cancer," <i>Monoclonal Antibodies and Cancer Therapy</i> , 1985, pp. 77-96, Alan R. Liss, Inc.
78	Cooper, H. S. et al., "Clinicopathologic Study Of Dextran Sulfate Sodium Experimental Murine Colitis," <i>Laboratory Investigation</i> , 1993, 69(2), 238-249

EXAMINER /Phillip Gambel/

DATE CONSIDERED

12/03/2008

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.G./

Form PTO-1449 Modified	Docket No. CELL-0315	Application No. 10/578,384
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)	Applicant Alastair David Griffiths Lawson, et al.	
U.S. Department of Commerce Patent and Trademark Office	Filing Date January 16, 2007	Group 1645
	Confirmation No. 1913	

NON-PATENT DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

79	Cull, M. G. et al., "Screening for receptor ligands using large libraries of peptides linked to the C terminus of the lac repressor," <i>Proc. Natl. Acad. Sci. USA</i> , 1992, 89, 1865-1869
80	Cwirla, S. E. et al., "Peptides on phage: A vast library of peptides for identifying ligands," <i>Proc. Natl. Acad. Sci. USA</i> , 1990, 87, 6378-6382
81	Devlin, J. J. et al., "Random Peptide Libraries: A Source of Specific Protein Binding Molecules," <i>Science</i> , 1990, 249, 404-406
82	DeWitt, S. H. et al., "Diversomers": An approach to nonpeptide, nonoligomeric chemical diversity," <i>Proc. Natl. Acad. Sci. USA</i> , 1993, 90, 6909-6913
83	Dubowchik, G. M. et al., "Receptor-mediated and enzyme-dependent targeting of cytotoxic anticancer drugs," <i>Pharmacol. Ther.</i> , 1999, 83, 67-123
84	Elson, C. O. et al., "Experimental Models Of Inflammatory Bowel Disease," <i>Gastroenterology</i> , 1995, 109(4), 1344-1367
85	Erb, E. et al., "Recursive deconvolution of combinatorial chemical libraries," <i>Proc. Natl. Acad. Sci. USA</i> , 1994, 91, 11422-11426
86	Felici, F., "Selection of Antibody Ligands from a Large Library of Oligopeptides Expressed on a Multivalent Exposition Vector," <i>J. Mol. Biol.</i> , 1991, 222, 301-310
87	Fiocchi, C., "Inflammatory Bowel Disease: Etiology And Pathogenesis" <i>Gastroenterol.</i> , 1998, 115, 182-205
88	Fodor, S. P. A., "Multiplexed biochemical assays with biological chips," <i>Nature</i> , 1993, 364, 555-556
89	Gallop, M. A. et al., "Applications of Combinatorial Technologies to Drug Discovery. 1. Background and Peptide Combinatorial Libraries," <i>J. Med. Chem.</i> , 1994, 37(9), 1233-1251
90	Haran-Ghera, N. et al., "Increased circulating colony-stimulating factor-1 (CSF-1) in SJL/J mice with radiation-induced acute myeloid leukemia (AML) is associated with autocrine regulation of AML cells by CSF-1," <i>Blood</i> , 1997, 89(7), 2537-2545
91	Hellström, K. E. et al., "Antibodies for Drug Delivery," <i>Controlled Drug Delivery</i> , 2 nd Ed., Robinson et al., eds., 1987, pp. 623-653

EXAMINER	/Phillip Gabel/	DATE CONSIDERED	12/03/2008
-----------------	-----------------	------------------------	------------

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.G./

Form PTO-1449 Modified	Docket No. CELL-0315	Application No. 10/578,384
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)	Applicant Alastair David Griffiths Lawson, et al.	
U.S. Department of Commerce Patent and Trademark Office	Filing Date January 16, 2007	Group 1645
	Confirmation No. 1913	

NON-PATENT DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

92	Hoshida, T. et al., "Gene therapy for pancreatic cancer using an adenovirus vector encoding soluble flt-1 vascular endothelial growth factor receptor," <i>Pancreas</i> , 2002, 25(2), 111-121
93	Houghten, R. A. et al., "The Use of Synthetic Peptide Combinatorial Libraries for the Identification of Bioactive Peptides," <i>Bio/Techniques</i> , 1992, 13(3), 412-421
94	Ikuno, Y., "An in vivo gene therapy approach for experimental proliferative vitreoretinopathy using the truncated platelet-derived growth factor α receptor," <i>Invest Ophthalmol. Vis. Sci.</i> , 2002, 43(7), 2406-2411
95	Jacoby, D. R. et al., "An In Vivo Gene Therapy Approach for Experimental Proliferative Vitreoretinopathy Using the Truncated Platelet-Derived Growth Factor α Receptor," <i>Gene Therapy</i> , 1997, 4, 1282-1283
96	Kettleborough, C. A. et al., "Isolation of tumor cell -specific single-chain FV from immunized mice using phage-antibody libraries and the re-construction of whole antibodies from these antibody fragments," <i>Eur. J. Immunol.</i> , 1994, 24, 952-958
97	Klebl, F. H. et al., "Expression of macrophage-colony stimulating factor in normal and inflammatory bowel disease intestine," <i>J. Pathol.</i> , 2001, 195(5), 609-615
98	Kochanek, S., "High-Capacity Adenoviral Vectors for Gene Transfer and Somatic Gene Therapy," <i>Human Gene Therapy</i> , 1999, 10, 2451-2459
99	Kohler, G. & Milstein, C., "Continuous Cultures of Fused Cells Secreting Antibody of Predefined Specificity," <i>Nature</i> , 1975, 256, 495-497
100	Kozbor, D. et al., "The production of monoclonal antibodies from human lymphocytes," <i>Immunology Today</i> , 1983, 4(3), 72-79
101	Lam, K. S., "Application of combinatorial library methods in cancer research and drug discovery," <i>Anticancer Drug Des.</i> , 1997, 12, 145-167
102	Lam, K. S., et al., "A new type of synthetic peptide library for identifying ligand-binding activity," <i>Nature</i> , 1991, 354, 82-84
103	Lee, E. J. et al., "Adenovirus-directed expression of dominant negative estrogen receptor induces apoptosis in breast cancer cells and regression," <i>Mol. Med.</i> , 2001, 7(11), 773-782

EXAMINER	/Phillip Gambel/	DATE CONSIDERED	12/03/2008
-----------------	------------------	------------------------	------------

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.G./

Form PTO-1449 Modified		Docket No. CELL-0315	Application No. 10/578,384
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Alastair David Griffiths Lawson, et al.	
U.S. Department of Commerce Patent and Trademark Office		Filing Date January 16, 2007	Group 1645
		Confirmation No. 1913	

NON-PATENT DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

104	Makiyama, K. et al., "Serum concentration of macrophage colony stimulating factor (M-CSF) in patients with inflammatory bowel disease," <i>Gastroenterol. Jpn.</i> , 1993, 28(5), 740
105	Marotta, F. et al., "Disrupted mucosal barrier in quiescent ulcerative colitis: Effect of metronidazole and of a symbiotic preparation in a pilot cross-over study," <i>Chinese Journal of Digestive Diseases</i> , 2003, 4(4), 180-185
106	Metcalf, D., "Studies On Colony Formation In Vitro By Mouse Bone Marrow Cells. II. Action Of Colony Stimulating Factor," <i>J. Cell Physiol.</i> , 1970, 76(1), 89-99
107	Miller, A. D. et al., "Use of Retroviral Vectors for Gene Transfer and Expression," <i>Meth. Enzymol.</i> , 1993, 217, 581-599
108	Milstein, C. et al., "Hybrid hybridomas and their use in immunohistochemistry," <i>Nature</i> , 1983, 305, 537-539
109	Mizoguchi, A. et al., "Immune networks in animal models of inflammatory bowel disease," <i>Inflammatory Bowel Disease</i> , 2003, 9(4), 246-259
110	Persic, L. et al., "An integrated vector system for the eukaryotic expression of antibodies or their fragments after selection from phage display libraries," <i>Gene</i> , 1997, 187, 9-18
111	Podolsky, D. K., "Inflammatory Bowel Disease," <i>N. Engl. J. Med.</i> , 2002, 347(6), 417-429
112	Reynolds, P. N. et al., "Chimeric viral vectors – the best of both worlds?," <i>Molecular Medicine Today</i> , 1999, 1, 25-31
113	Robbins, P. D. et al., "Viral Vectors for Gene Therapy," <i>Pharmacol. Ther.</i> , 1998, 80, 35-47
114	Roth and Stanley, <i>Current Topics in Microbiology and Immunology</i> , 1992, 181, 141-167
115	Sandborn, W. J., "A Review Of Immune Modifier Therapy For Inflammatory Bowel Disease: Azathioprine, 6-Mercaptopurine, Cyclosporine, And Methotrexate," <i>Am. J. Gastroenterol.</i> , 1996, 91(3), 423-432
116	Sandborn, W. J., "Biologic Therapy Of Inflammatory Bowel Disease," <i>Gastroenterol.</i> , 2002, 122, 1592-1608

EXAMINER	/Phillip Gambel/	DATE CONSIDERED	12/03/2008
-----------------	------------------	------------------------	------------

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.G./

Form PTO-1449 Modified	Docket No. CELL-0315	Application No. 10/578,384
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)	Applicant Alastair David Griffiths Lawson, et al.	
U.S. Department of Commerce Patent and Trademark Office	Filing Date January 16, 2007	Group 1645
	Confirmation No. 1913	

NON-PATENT DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

117	Scott, J. K. et al., "Searching for peptide ligands with an epitope library," <i>Science</i> , 1990, 249, 386-390
118	Thorpe, P. E. et al., "The Preparation and Cytotoxic Properties of Antibody-Toxin Conjugates," <i>Immunol. Rev.</i> , 1982, 62, 119-158
119	Traunecker, A. et al., "Bispecific single chain molecules (Janusins) target cytotoxic lymphocytes on HIV infected cells," <i>EMBO J.</i> , 1991, 10(12), 3655-3659
120	Verma, R. et al., "Antibody engineering: Comparison of bacterial, yeast, insect and mammalian expression systems," <i>J. Immunol. Meth.</i> , 1998, 216, 165-181
121	Weir, E. C. et al., "Colony Stimulating Factor-1 Plays A Role In Osteoclast Formation And Function In Bone Resorption Induced By Parathyroid Hormone And Parathyroid Hormone-Related Protein," <i>J. Bone Miner. Res.</i> , 1996, 11(10), 1474-1481
122	Wu, G. Y. et al., "Receptor-mediated in Vitro Gene Transformation by a Soluble DNA Carrier System," <i>J. Biol. Chem.</i> , 1987, 262(10), 4429-4432
123	Zuckermann, R. N. et al., "Discovery of Nanomolar Ligands for 7-Transmembrane G-Protein-Coupled Receptors from a Diversc N-(Substituted)glycine Peptoid Library," <i>J. Med. Chem.</i> , 1994, 37, 2678-2685

EXAMINER	/Phillip Gambel/	DATE CONSIDERED	12/03/2008
-----------------	------------------	------------------------	------------

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.G./